VIRGINIA.

Botetourt: Eagle Rock, Lewis, April 27, 1929 (P, Va. State Herbarium). Roanoke: Roanoke, E. G. Britton and Vail, May 16–27, 1892 (G, N, P, U).

Clematis viticaulis Steele¹²

This species is known thus far only from the type locality, where it occurs on shale slopes along the railroad west of the tunnel. The characters listed in the key amply differentiate it.

VIRGINIA.

Bath: West of Millboro, Steele, Sept. 3, 1906 (N, U); Wherry, June 11, 1930 (P).

Clematis albicoma Wherry, nomen novum

C. ovata of current manuals, not Pursh

So far as recorded this plant was first collected on Kates Mountain by Gustav Guttenberg in 1877. The way it came to be identified with Pursh's *Covata* has been discussed above. It differs from that, however, in the respects enumerated in the key, and accordingly requires a new name, which is appropriately derived from its most unique character, the whitish hairs on the achene-appendages. It occurs on various shale-barrens, and has been collected from the following:

VIRGINIA.

Allegheny: 1½ miles west of Covington, Wherry, June 10, 1930 (N, P). Bath: Hot Springs, Hunnewell, May 11 to July 3, 1911 (G) Southwest of Hot Springs, Wherry, June 10, 1930 (P).

WEST VIRGINIA.

Greenbrier: Kates Mountain, many collectors and dates (G, N, P, U). This is to be taken as the type locality of the species, and as type specimen should be designated:

Guttenberg, July 31, 1877 (U).

ZOOLOGY.—A report on some amphibians and reptiles from New York and New Jersey.¹ Charles E. Burt,² Trinity University. (Communicated by Doris M. Cochran.)

During the academic year of 1929–1930, while I was a member of the herpetological staff of the American Museum of Natural History, I took the opportunity to make occasional studies of the local amphibians and reptiles, both in New York and New Jersey; and, as a consequence of this, the following locality data and ecological annotations have been gathered.

With future continuation of the phenomenal constructive activity at present in progress in the New York City region, it is evident that

¹² Steele, Contr. U. S. Nat. Herb. 13: 364. 1911.

¹ Received March 13, 1931.

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great ecological pressure will be brought to bear on the local fauna and that progressive extermination or succession of animal communities at many points must inevitably follow. In view of this, concise locality data on the local fauna, as opposed to generalized records, are especially needed. Noble (1927) in his "Distributional List of the Reptiles and Amphibians of the New York City Region," which presents only a preliminary statement of the general range of each of the local species, called attention to this need by writing that "Exact locality records of practically all our species are greatly desired. It is only when they are brought together that a clear picture of the distribution of our local species can be obtained."

SALAMANDERS

Triturus viridescens viridescens (Rafinesque).—On April 12 a small red eft, the land form of the common newt, was obtained 4 miles north of Alpine, Bergen County, New Jersey, among soggy, dead leaves near a semi-stagnant streamlet, which was found to contain developing egg masses of the wood frog, Rana sylvatica. On April 19 another example was secured near this point in the water of a stagnant, leaf-filled roadside ditch; and on this same date two others were taken 3 miles north of Engelwood, Bergen County, New Jersey, in a swampy area where they were sheltered by crevices in the rocks.

Plethodon cinereus (Green).—This salamander was commonly found in woods under stones and in or under rotting logs or other objects when sufficient moisture was available. It appears that in the spring there is often too much moisture for cinereus in the valleys, but too little on the more exposed hilltops. At this time the maximum abundance is found on the hillsides where moisture and protection are more nearly at the optimum. Later, if the summer brings drying, a migration into the valleys or a disappearance into subterranean retreats probably takes place.

In New Jersey, both dark and red-backed phases were common. On April 7 and April 12 small series were secured 4 miles north of Alpine, Bergen County, from under stones and from rotted wood on a timbered hillside above a small stream, but on April 19 a total of 114 specimens was secured here within a period of about two hours. On the latter date *cinereus* was found to occur 3 miles north of Engelwood, Bergen County. On October 12–13 specimens were collected 1 mile north of Island Heights and at Lakehurst, in Ocean County. At the last locality individuals were found in damp situations under pieces of tin, cardboard and cloth, as well as under damp bark and leaves.

In New York, a small individual secured at West Haverstraw, Rockland County, on April 12, was found to have a perfectly developed red-backed color pattern. It measured 15 mm. from snout to anus, and the tail was 10.5 mm. long (total length, 25.5 mm.). In the laboratory this small creature showed a tendency to get a running start before making the characteristic jump of the species, demonstrating this method several times. The jumps

were only about an inch in length. Additional New York representatives of this salamander were obtained 1 mile south of Harriman, Orange County; 12 miles southwest of the St. George Ferry, Staten Island, Richmond County; 2 miles north of Rockland Lake, Rockland County; and at Grassy Sprain Reservoir, Westchester County. The last place was visited on June 11 and specimens were found to be scarce because of a drying of the woods.

Plethodon glutinosus (Green).—Several specimens of this form were removed from under flat rocks on a wooded hillside 4 miles north of Alpine, Bergen County, New Jersey, on April 12 and April 19. In this vicinity glutinosus apparently occupies the same general situations as the much more abundant cinereus.

Pseudotriton ruber ruber (Sonnini).—On April 7 the red salamander was found 4 miles north of Alpine, Bergen County, New Jersey; and on April 19 it was taken 3 miles south of Piermont, in the same county. At both places the species was dislodged from under flat rocks near the edge of shallow, clear, cold bodies of running water, and in each instance individuals attempted to escape by diving downward toward crevices among the rocks at the bed of the stream.

Eurycea bislineata bislineata (Green).—On April 7 two-lined salamanders were discovered under rocks at the border of a small stream 4 miles north of Alpine, Bergen County, New Jersey, and on April 19 others were found in a similar situation 3 miles south of Piermont (Bergen County, New Jersey). These attempted to escape by lodging under rocks in the water below. On April 12, examples were secured among soaked leaves in the pathway of seepage from a spring near a small stream 1 mile south of Harriman, Orange County, New York, and on April 16 specimens were taken in a similar habitat at Grassy Sprain Reservoir, Westchester County, New York.

Desmognathus fuscus fuscus (Rafinesque).—The dusky salamander was found in very moist situations under rocks or leaves near streams or pools and, upon being disturbed, it usually tried to escape by rushing toward the water. In Bergen County, New Jersey, the species was procured on April 7 near a streamlet 4 miles north of Alpine, and on April 19, near a larger flow of water 3 miles south of Piermont. The New York specimens of fuscus were all collected on April 12. They were found 1 mile north of Lake Tiorati, near the "Seven Lakes Drive," and 1 mile south of Harriman, both localities being in Orange County; and under rocks near a small stream on the north slope of Dunderburg Mountain, in Rockland County.

TOADS

Bufo americanus Holbrook.—On April 19 this toad was taken 1 mile north of Leonia, Bergen County, New Jersey. On this cold evening many individuals were calling from an extensive fresh-water swamp in the vicinity, but only a few clasping pairs were located. The female of one such pair was laying eggs and females transferred to the laboratory deposited eggs during the night.

An examination of a series of these toads revealed some with distinct black

spots below and others without such markings; but most of them had at least a few faint black spots or slaty patches on the upper chest.

Bufo fowleri Garman.—Bufo fowleri GARMAN, Bull. Essex Inst., 16: 42. 1884 (type locality, Massachusetts).—Bufo terrestris BURT and BURT (not of Bonnaterre), Amer. Mus. Novitates, no. 381, 1929, p. 2 (reports from Louisiana, Texas, and Arkansas).—Through the courtesy of Mr. J. T. Nichols I had the opportunity to hear the call of Bufo fowleri at Garden City, Nassau County, New York, in June 1930. I recognized it at once as the same "goat-like" cry that I had heard in the Mississippi Valley the year before. The latter toads were doubtfully reported by Burt and Burt (1929) as Bufo terrestris on structural characters alone, but I am now convinced that they are B. fowleri—vocally at least! To this latter category the report of B. woodhousii Burt and Burt (1929) from 6 miles south of Vinton, Calcasieu County, Louisiana, which are based on young specimens, should probably also be placed.

Frogs

Acris gryllus (Le Conte).—A cricket-frog was captured on October 13 at the edge of a shallow pond, 12 miles southwest of the St. George Ferry, Staten Island, Richmond County, New York.

Hyla crucifera Wied.—Hyla crucifer WIED, Reise Nord-Amer., 15: 275. 1838 (type locality, Catonment Leavenworth, "Kansas").—Hyla crucifera MYERS, Proc. Indiana Acad. Sci. for 1926, 36: 338. 1927.—Spring-peepers were singing in Bergen County, New Jersey, on April 7, 19, and 28. They were abundant 1 mile north of Leonia, 1 mile north of Oradell, and at Harrington, particularly in flooded meadows where they clung to grass stems. Several specimens from the last locality had broken or incomplete crosses on their backs. In New York, crucifera was secured at the edge of a shallow pond 12 miles southwest of the St. George Ferry, Staten Island, Richmond County.

Hyla triseriata Wied.—Hyla triseriata WIED, Reise Nord-Amer., 14: 249. 1838 (type locality, Mt. Vernon, Ohio River, Indiana).—Pseudacris triseriata STEJNEGER and BARBOUR, Check List N. Amer. Amph. Reptil., ed. 2, 1923, p. 29.—In an area of flooded grass-land 1 mile north of Oradell, Bergen County, New Jersey, it was found that frogs of this species were much more wary and harder to secure than those of Hyla crucifera (April 19).

Rana catesbeiana Shaw.—On April 28 a bullfrog was found sitting in the water of a pond 1 mile north of Leonia, Bergen County, New Jersey, but the song of the species was not heard at this time.

Rana clamitans Latreille.—Green-frogs are common in the vicinity of the larger of the small streams at the localities given below, as well as about small lakes and ponds. On April 20 they were very hard to secure at Garfield, Bergen County, New Jersey, where they often escaped by diving. Specimens were taken in the daytime from under flat stones near streams at Queensboro Lake and 1 mile north of Lake Tiorati, in Orange County, New York, on

April 12, and on October 13 several examples, including a tadpole, were collected 12 miles southwest of the St. George Ferry, on Staten Island, Richmond County, New York.

Rana halecina Linnaeus.—Rana halecina LINNAEUS, Syst. Nat., ed. 12, pt. 1, 1766, p. 356 (first latinized binomial name for Kalm's sillhoppetosser, type locality, New Jersey).—BOULENGER, Proc. Amer. Acad. Arts and Sciences, 55: 433. 1920.—BURT, Proc. Biol. Soc. Wash., 44: 13. 1931.—Rana pipiens SCHREBER, Der Naturforscher, 18: 182, pl. 4. 1782 (type locality, Pennsylvania).—Leopard frogs were calling in Bergen County, New Jersey, on April 19, where they were secured at Garfield and 1 mile north of Leonia.

Rana sylvatica Le Conte. On April 7 woodfrogs were not in full song at Harrington, Bergen County, New Jersey, but their notes were occasionally heard. Large egg masses were seen in a flooded meadow in this vicinity, and this indicated that the height of the mating season had passed. Examination of clusters revealed living embryos in various stages of development.

On June 11 adult woodfrogs were obtained in Donald Park, Westchester County, New York, where they sought concealment by hopping into masses of green vegetation. A pond near here sheltered *Rana clamitans*, as attested by the characteristic "zoom" which came from that quarter.

LIZARDS

Sceloporus undulatus undulatus (Latreille).—On the sunny afternoon of October 12 pine lizards were very abundant about logs 1 mile west of Lakehurst, Ocean County, New Jersey.

Leiolopisma laterale (Say).—One of these little skinks was taken near a pile of brush 1 mile west of Lakehurst, Ocean County, New Jersey, in the same general habitat as Sceloporus undulatus undulatus.

SNAKES

Lampropeltis triangulum triangulum (Lacépède).—On June 11, 1930, a young specimen of this king-snake, probably of the 1929 brood, was found in the open road in Donald Park, Westchester County, New York, where a stone pile at the side of the highway probably served as its home.

Natrix sipedon sipedon (Linnaeus).—This water snake was captured near a stream in the vicinity of the railroad station at Tappan, Rockland County, New York, on April 15.

Thamnophis sirtalis sirtalis (Linnaeus).—On the sunny afternoon of October 13, one of these snakes wandered into the road from its abode at the margin of a salt marsh 1 mile west of Matawan, Monmouth County, New Jersey; and here it was easily captured.

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ETHNOLOGY.—The Caddo social organization and its possible historical significance. John R. Swanton, Bureau of American Ethnology.

A large number of Indian tribes, as is well known, were divided internally into social groups called *clans*, *gentes*, or *sibs*. These usually, though not invariably, bore the name of some animal, plant, or natural feature, and where this was not the case they often maintained special relations with such organisms or objects. Associations of this kind constitute what we know as totemism and have been the occasion of endless discussion.

A striking characteristic of these tribal subdivisions is the fact that they were usually perpetuated either in the male line or the female line exclusively, and the terms above mentioned have been given technical definitions accordingly, a clan referring to a social group perpetuated in the female line, a gens to one perpetuated in the male line, while sib is employed when one wishes to indicate either indifferently. Often the sibs in any given tribe form larger groupings for which the terms phratry and moiety are used, the latter mainly restricted to the very common condition where there are but two major classes such as are represented among the Iroquois, Choctaw, and Haida.

Divergencies from the standard are numerous, and it is always interesting to discover one of these since atypical forms usually throw more light upon the origin of the institution than those which fall into the classic categories.

When the writer was among the Caddo Indians near Anadarko, Oklahoma, about twenty years ago, he elicited some interesting information of this sort, but it has lain in manuscript because he was not then able to follow up the matter or check it. While he has not been able to verify this since, it seems worth while to make it a matter of record as there is no reason to doubt its substantial accuracy, and it suggests some important conclusions.

The living Caddo consist of remnants of two considerable con-

¹ Received March 25, 1931.